

















## 01\_下のWinspecをクリック

















WinSpec/32			
File Edit View Acquisition Calibration Tools Display Spectrograph Process	Setup Window Help		
BE BE BE BE BE	Hardware Detector Temperature Pulsers		
	Environment Custom Toolbar Preferences	•	
	Load Factory Defaults	•	
	Diagnostics	•	

03\_Hardwareを選ぶ









### 04\_次へを選ぶ

This wizard w sure your sys	Il attempt to detec em is connected t	ct the camera syste to the computer and	em you are using. Plea I powered on before pi	ase make roceeding.
	🔲 I will config	ture the camera sys	stem manually	
	く 戻る(B)	)次へ(N) >	++>UUN	ヘルプ





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# 05\_カメラの認識を確認して選び次へ

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sition Calibration Tools Display Spec	ctrograph Process Setup Window Help	
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	Camera Detection Wizard - Detected Hardware	
	The camera detection wizard has found the following camera systems:	
	Camera COD Name COD Size Interface Camera1 EEV 400x1340B_DD 1340 x 400 GIG-E	
	Please select the camera you are using and press Next to continue. If your camera is not in the list resear by pressing Back	
	< 戻る(B) 次へ(N) > キャンセル ヘルプ	
		————————————————————————————————————

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c.	↑ Yes	No	













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WinSpec/32			
File Edit View Acquisition Calibration Tools Display	Spectrograph Process	Setup Window Help	
BC ATC MV 10100	Move		
	Define		
	Calibrate		
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# 08\_分光器の定義





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### 09\_Install Removeをクリック

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[Exc	itation ——	a		
	Laser Way	elength	⊡ nm	
	1 Warri	When Grossing Laser Li	ie.	
	Install	/ Remove Spectrograp	n	



10\_Acton SP500iを選ぶ

installed Spectr	ographs	
Remo	ive Selected Spectri	ograph
Supported Spec Acton SP275 Acton SP300i Acton SP500 Acton SP500	trographs:	A E
Acton SP750 Acton SP750i		,
Communication	ns Port: Auto	 graph

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File	Edit	View	Acquisition	Calibration	Tools	Display	Spectrograph	Process	Setup	Window	Help	
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### 11\_SP500iが入る

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8	800 F	10 2	) <u>s</u> _t  /_		▲↓	• •	H H				

### 12\_回折格子種類認識

ain Gratines Slits/	Mirrors	
	Currer	nt Turret ───────────────────────
	Gratings	
1	2	3
Grooves 600	<u>▼</u>  300 <u>▼</u>	150 👤
Name BLZ= !	500NM BLZ= 500NM	BLZ= 800NM
	Backlash ———	
Re	quired 🗖 Steps : 0	
		-
C C	isplay Warning On Grating Ch	hange
	ement Mode: Slew (Faster	r) 🔻
Grating Mov	and the second second second	
Grating Mov		

![](_page_11_Picture_4.jpeg)

![](_page_12_Picture_0.jpeg)

## 13\_ミラー サイド フロント

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Side	Entrance 🔲 10 📑 um
	Front Exit 🔲 10 💼 um
	Side Exit 🔲 10 🕂 um
	Required T Steps: 0
-Controllable Mi	irrors Enabled Position

![](_page_12_Picture_4.jpeg)

![](_page_13_Picture_0.jpeg)

![](_page_14_Picture_0.jpeg)

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	-			Acquire			la lu l										
[i-77)				Focus			<b>PP P</b>					 	 	 	 	 	
日版」の				Video Focus													
				Hardware LUT													
J				Exposure / Intensity.													
Acrobat				Easy Bin													
D				Step and Glue													
	1			Readout Time													
P				Acquire Background													
5				Acquire Flat Field													
PCお役I				Video													
				Pulse Counter													
				Stop Acquisition													
Skγ				Start Storage													
				27													

16\_検出器使うときはAcquisition

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![](_page_15_Picture_2.jpeg)

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- 97.0	
N	umber of Spectra 1
CCD F	Readout
οU	se Full Chip 🛛 🤉 Use Region Of Interest
Re	adout Dimensions: X:1340 Y:400
Accun	nulations
Nu	mber: 1
	1

## 17\_Focusは連続運転 Acquireは1回きり

For Help, press F1

![](_page_16_Picture_8.jpeg)

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File Edit View Acquisition Calibration Tools Display Spectrograph Process Setup Window Help

![](_page_17_Figure_3.jpeg)

18\_FocusとAcquireのショートカット左上の緑の2つ ACQ, F

For Help, press F1

![](_page_17_Picture_6.jpeg)

🖌 WinSpec/32 - 無題		
File Edit View Acquisition Calibration Tools Display Spectrograph Process Setup W	ndow Help	
B-B ATC 10101 123		
☆ 無題 (1340 X 400 X 1)		
100         00 <td></td> <td></td>		

## 19\_冷却時OsとUseFullChipで Focus 押す

![](_page_18_Picture_2.jpeg)

![](_page_18_Picture_3.jpeg)

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![](_page_19_Figure_0.jpeg)

### 20\_ 冷却有無の判断は温度から

![](_page_19_Picture_2.jpeg)

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![](_page_20_Figure_0.jpeg)

### 21\_CurrentTemperatureが-120°Cより高いときは液チをたして19の操作

![](_page_20_Picture_2.jpeg)

![](_page_20_Picture_3.jpeg)

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![](_page_21_Figure_0.jpeg)

22\_Focus 中は温度がみれないので一瞬とめて確認, 液チ投入2回吹くまで。Temp Locked まで 目安2h, 冷えれば50hもつ。

Frames: 0 Accums: 0

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![](_page_21_Picture_2.jpeg)

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![](_page_22_Figure_2.jpeg)

WinSpec/32

23\_液窒投入2hでTemperaturLockedの表示 これで使用 可能

Target Temperature		Set Temp.
Current Temperatur	e:Locked	Read Temp.
	-	

![](_page_22_Picture_5.jpeg)

![](_page_22_Picture_6.jpeg)

![](_page_22_Picture_7.jpeg)

ile Edit	: View	Acquisition	Calibration	Tools Display	Spectrograph	Process S	Setup Windo	ow Hel	р					
Ka AUC	<b>mv</b> 193	101 1												
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74 47						120		M	Vavelength [nm]			400		
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X= 39	8.46 Y=	= 52  Z= 1	I= 625											1.

![](_page_23_Picture_1.jpeg)

![](_page_23_Picture_2.jpeg)

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![](_page_23_Picture_3.jpeg)

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![](_page_23_Picture_5.jpeg)

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![](_page_24_Figure_0.jpeg)

![](_page_25_Figure_0.jpeg)

26\_波長較正offset adjust 後 300G 理論值435.833nm 実測435.93nm

![](_page_25_Picture_2.jpeg)

のインストール

![](_page_25_Picture_3.jpeg)

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★ 無題 (1340 X 1 ) 7000 -	× 1)	
	Spectrograph Calibration	
6000	Spectrograph To Calibrate : Acton SP500i	
0000	Grating To Calibrate :	
	150 BLZ= 800NM	
5000 -	Detector Pixel Width : 20	
Inter	Magnification : 1 Defaults	
4000 -	Grating Movement Mode:	
	Slew (Faster)	
3000 -	Calibration Procedures :	
2000 -	OK Cancel Help	
		Ú I
1000 -		

#### シート ウイルスバスター のインストール

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![](_page_26_Picture_2.jpeg)

![](_page_26_Picture_3.jpeg)

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## 27\_波長較正offset adjust 後 150G 理論值435.833nm 実測435.87nm

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